

INVENTOR: McBride et al  
TITLE: MEDICAL TESTING AND METHOD

attorney docket: CARDIOBEAT-I

**EXHIBIT 5**

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**New Product  
BUSINESS PLAN  
FOR  
cardiobeat.com**

**to deliver**

**"HEART TRACK"**

**an Internet based heart performance procedure  
for physicians and patients**

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**Presented to:**

**10/1/1999**

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# Cardiobeat.com Business Plan

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cardobeat.com

Business Plan

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# Executive Summary

## Cardiobeat.com Plan

Cardiobeat.com (Cardiobeat) has developed a software product, "HEART TRACK", which will revolutionize heart health care and heart disease treatment throughout the world. The information collected dramatically improves cardiovascular health assessment. The relatively low price and "on demand" availability at homes, physician's offices, and hospitals will encourage increased usage. A database of tests taken periodically will support health management through trend analysis. The cumulative effect of regular testing, precise measurements, and computer analysis, will be improved cardiovascular health at greatly reduced costs.

Fifty eight million Americans suffer from heart disease and five million Americans are victims of heart failure. Heart disease is the most prolific killer and the most expensive area of medical treatment in America. Extrapolating the US statistics to the industrial world populations, creates projections of, 230 million victims of heart diseases and 21 million victims with heart failure. There is a large, motivated, prospect base.

"HEART TRACK" will be delivered over the Internet to patients and physicians. The user will purchase leads and sensors for performing the procedure. The "HEART TRACK" Software will be downloaded on demand for performance of the test with instructions. The user will plug the sensors into the serial port of the client workstation for data collection.

Cardiobeat is seeking \$1.5 million in initial capital to validate the commercial potential of "HEART TRACK" through productization of the software procedure and creation of the delivery capability. Deployment of "HEART TRACK" over the Web requires that Cardiobeat complete the following major tasks. These tasks are detailed in the attached project plan:

1. Productize the "HEART TRACK" software for use by novices
2. Build deployment management tools "HEART TRACK and a database to store "HEART TRACK" results
3. Execute a sales and marketing plan to create demand for 25,000 tests per month in 7 months and protect the technology
4. Create a capital budget and execution plan for bringing "HEART TRACK" to a mass market product

The first phase of implementation is a three-month plan requiring 35 professionals to complete the tasks. Completion all components of the finished product will position Cardiobeat to begin the commercialization of "HEART TRACK" during the next three months of operation.

Today, lack of timely, precise, information inhibits management of cardiovascular health by patients and physicians. In many cases, the first symptom of heart disease is sudden death. "HEART TRACK" is a non-invasive procedure to augment and supplant the Right Heart Catheterization procedure, as the "gold standard" for diagnosing cardiovascular condition. "HEART TRACK" will be offered over the web for use in the physician's office or at home by the patient.

"HEART TRACK" is a sophisticated software tool for collecting, filtering, analyzing, and presenting detailed information about the cardiovascular system. Sensors, attached to the throat, and chest, of

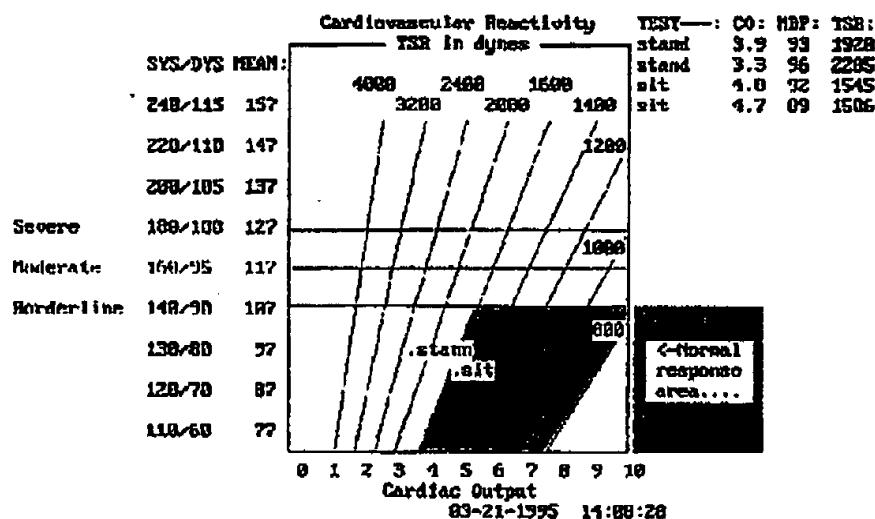
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the patient provide the facts necessary for performing the test. The sensors are connected to the internet through a personal computer's serial port (or Universal Serial Bus).

"HEART TRACK" employs a medical technology called impedance cardiology. An undetectable alternating current is introduced into the body by placing circuit generating electrodes on the forehead and distally on the abdomen. It is possible to measure resistance changes across the thorax. The drop in voltage between sensors is measured and mathematically reduced to produce a profile of the patient's cardio-vascular system, with results equivalent to an invasive heart catheterization.

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The following graphic displays an easy to understand representation of three key measurements from the HEART TRACK test.



This chart illustrates the measurement of cardiovascular performance by plotting three variables and highlighting a normal area for a quick understanding of cardiovascular health. The upper right hand corner contains the raw plot data. The Graphic plots along each axis with a separate scale. "CO" is cardiac output in liters (the amount of blood pumped by the heart). "MBP" is the mean blood pressure, an averaging of the two measures (systolic and diastolic). "TSR" is Total Systemic Resistance to blood flow. TSR is a gauge of the resistance in the blood vessels to the flow of blood (clogged artery measurement). Summarization of this data into a single graphic provides a clear assessment of heart health. These variables are three of 19 measurements produced by HEART TRACK.

The measurements are taken 4 times over a 25-heartbeat test period per test. Two tests are sitting and two standing. The act of standing places a substantial strain on the heart. The heart's reaction to this strain is additional information relevant to heart health.

Periodic testing will provide trend analysis that will highlight changes in cardiovascular health. For example, the effect of exercise, weight change, and diet will be reflected in these measurements.

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Impedance cardiology was invented in the 30's, employed in the 60's by NASA for the Apollo program, and offered commercially as a clinical instrument in the 80's by the predecessor company to Cardiobeat, Softque, Inc. Cardiobeat has purchased the technology from Softque, Inc.

The revenue potential is substantial, as "Heart Track will,

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will generate substantial revenues. Fifty million tests per year at a price of \$50, a 10% penetration of the market, the revenues are \$2.5 billion. Additional capital will be required to reach this market share.

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HEART TRACK

## Mission Statement

To establish Cardiobeat with physicians, managed care organizations, hospitals, cardiovascular patients and key governmental advisory committees as the premier company at the center of the Internet Health Care revolution

To establish HEART TRACK as the first significant economical and user friendly set of health care services from Cardiobeat that revolutionize the monitoring and treatment of heart disease in patients in the U.S. and worldwide

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To manage the business of Cardiobeat in such a manner to maximize the ROI to its shareholders

To manage the business of Cardiobeat in a very professional and ethical manner so as to establish a reputation that will attract and retain customers and investors

To establish a follow up program that will enable Cardiobeat to market other non-invasive medical tests services to reinforce their commitment to heart disease and its related effects

## "HEART TRACK" is a Paradigm Shift in the Management of Cardiovascular Health

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The price and availability of "HEART TRACK" will change the way heart disease is managed.

Cardiobeat will deliver a product providing detailed heart health information at a dramatically lower price. Easy access to the test and its information will increase the patient's knowledge and encourage better compliance with treatment regimens. The amount of information for analytical purposes will increase to 100's of millions of data points. This information will create a new statistical base for understanding heart disease.

The record keeping function and its use for computing trends will become a magnet for other health information. Periodic testing amplified by trend analysis will encourage repeat visits. This partnership of health management through time will dispose patients to expand information content. Since the test collection and trend analysis will always be here, why not add medication history, and other medical information. Sharing with physicians is an added incentive.